



GE
159 Plastics Avenue
Pittsfield, MA 01201
USA

Transmitted via Overnight Courier

July 24, 2007

Mr. Dean Tagliaferro
EPA Project Coordinator
U.S. Environmental Protection Agency
c/o Weston Solutions, Inc.
10 Lyman Street
Pittsfield, MA 01201

**Re: GE-Pittsfield/Housatonic River Site
Groundwater Management Area 3 (GEC330)
Addendum to Supplemental Soil Gas Migration Assessment Report and Sampling Plan**

Dear Mr. Tagliaferro:

On March 16, 2007, the General Electric Company (GE) submitted to the United States Environmental Protection Agency (EPA) a document titled *Supplemental Soil Gas Migration Assessment Report and Sampling Plan - Groundwater Management Area 3* (Supplemental Assessment Report and Sampling Plan). That document was a follow-up to previous GE reports which summarized the results of groundwater, light non-aqueous-phase liquid (LNAPL), soil gas, and indoor air sampling conducted by GE near and within GE-owned Buildings 51 and 59 at the GE Pittsfield facility; and it was submitted in response to a conditional approval letter issued by EPA on February 15, 2007. The Supplemental Assessment Report and Sampling Plan summarized the results of an inspection performed by GE in October 2006 at Buildings 51 and 59 to identify potential pathways by which soil gas beneath the building may enter the buildings through the slabs or sidewalls. That report also included, at EPA's direction, GE's proposed plans for future monitoring of soil gas and indoor air below and within Buildings 51 and 59, as well as for conducting an inventory to identify commercial products within those buildings that may contain the chemicals that were detected in prior soil gas and indoor air samples.

GE received conditional approval of the Supplemental Assessment Report and Sampling Plan from EPA in a letter dated June 25, 2007. This *Addendum to the Supplemental Soil Gas Migration Assessment Report and Sampling Plan* (Addendum to Supplemental Assessment Report) has been prepared to address the requirements of Conditions 1 and 2 of EPA's June 25, 2007 letter:

- Condition 1 directed GE to determine which of the possible migration pathways identified in the Supplemental Assessment Report and Sampling Plan (including floor slab penetrations, manholes, cracks, pump pits, floor drains, and areas where a concrete slab is not present; collectively referred to herein as "penetrations") may extend to the underlying soil. Further, EPA directed that for each such pathway/penetration that extends to the underlying soil, GE should make every effort to seal those penetrations.

- Condition 2 directed GE to propose measures and a schedule to collect, and analyze for volatile organic compounds (VOCs), representative soil gas samples from the pathways/penetrations to underlying soil which could not readily be sealed.

The remainder of this letter summarizes the results of the assessment of possible migration pathways that were previously identified, and provides a summary of actions taken to date to seal pathways/penetrations that may have extended to the underlying soils. In addition, this letter provides a proposal for addressing several additional pathways/penetrations that could not readily be sealed during the available timeframe, and a schedule for future activities and associated reporting.

Assessment of Potential Migration Pathways

In accordance with Condition 1 of EPA's conditional approval letter, GE revisited each of the possible migration pathways identified in the Supplemental Assessment Report and Sampling Plan. Consistent with EPA's letter, this assessment was conducted to 1) determine whether any of these possible migration pathways constituted unsealed penetrations to the underlying soil, and 2) seal those possible migration pathways that did constitute unsealed penetrations to the underlying soil and could readily be addressed.

Each of the potential pathways/penetrations within Buildings 51 and 59 was revisited between July 9, 2007 and July 13, 2007. The results of the recent assessment determined that the potential pathways/penetrations can be classified into one of the following three categories: (1) floor penetrations that do not extend to the underlying soil, (2) penetrations that extended to the underlying soil and were sealed during the assessment, and (3) penetrations that extend or may extend to the underlying soil but which GE was not able to address in the available timeframe. For the third category, a plan to address the penetrations has been provided herein.

Building 51

The Supplemental Assessment Report and Sampling Plan identified 25 potential migration pathways within Building 51. Those items were documented by photographs in Attachment A-1 of that report, and are referred to in this document using the same numbering system. A summary of the assessment for these items in Building 51 is presented below.

Penetrations That Do Not Extend to the Underlying Soil

For items (1) through (10), (12), (16), (17), (18), (22) and (23), the recent assessment activities determined that the pathway/penetration does not extend to underlying soils. These were typically related to piping penetrations associated with roof drains, fire protection water, electrical supply, steam supply, floor drains, and sink drains. Each of these items is currently sealed with concrete or connected via piping directly to the City of Pittsfield sewer system, and is not an unsealed penetration to the underlying soil.

Penetrations to the Underlying Soil That Were Sealed During Recent Assessment

Items (11), (13), (14), and (15) were determined to be penetrations that may or did extend to the underlying soil. These items were addressed during the assessment by sealing each penetration with concrete grout. These consisted of conduit holes, superficial cracks, and cracks in floor seals around piping. Attachment A-1 provides photographic documentation of these activities.

Potential Penetrations to the Underlying Soil That Could Not Be Addressed in Available Timeframe

Items (19), (20), (21), (24) and (25) were determined to be penetrations that extend or may extend to the underlying soil, but were unable to be addressed or sealed during the available timeframe. These items included an open gravel floor area, two open pump pits, an open pipe chase, and a fire drain line at the unoccupied, northeast end of Building 51. Attachment A-2 provides photographic documentation of these potential pathways.

GE believes that each of the above-listed penetrations that could not be addressed within the available timeframe can likely be sealed with concrete and/or concrete grout. GE will make an effort to seal those penetrations shortly. If any of those penetrations cannot be sealed, GE will submit a follow-up proposal to conduct soil gas sampling in the vicinity of those locations in accordance with Condition 2 of EPA's June 25, 2007 letter.

Building 59

The Supplemental Assessment Report and Sampling Plan identified 26 potential migration pathways within Building 59. Those items were documented by photographs in Attachment A-2 of that report, and are referred to in this document using the same numbering system. A summary of the recent assessment activities related to these items is presented below.

Penetrations That Do Not Extend to the Underlying Soil

For items (1), (2), (3), (5) through (15), (18), (21) through (24) and (26), the recent assessment activities determined the pathway/penetration does not extend to the underlying. These items include piping penetrations associated with roof drains, fire protection water, electrical supply, steam supply, floor drains, and sink drains. These items are currently sealed with concrete or are connected via piping directly to the City of Pittsfield sewer system.

Penetrations to the Underlying Soil That Were Sealed During Recent Assessment

Items (4), (16), (17), (19), (20), and (25) were determined to be penetrations that may or did extend to the underlying soil. Items (4), (16), (17), (19), and (20) were addressed during the assessment by sealing each penetration with concrete grout. These consisted of conduit holes and superficial cracks. Item 25 (two steam pipes extending through a steel grate) was addressed by cutting the pipes below the steel grate and installing a new, fitted steel grate to seal over the pit below. Attachment B provides photographic documentation of these activities.

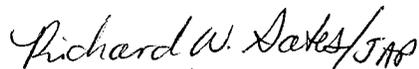
Thus, all potential pathway/penetrations previously identified within Building 59 have been addressed during the recent assessment and no follow-up activities are necessary for Building 59.

Follow-up Activities and Schedule

As described above, five penetrations within Building 51 that may extend to the underlying soil were unable to be sealed in the available timeframe. GE will evaluate those locations further in the near future and will attempt, if possible, to seal those penetrations with concrete and/or concrete grout. GE proposes to submit a follow-up report to EPA, summarizing the results of those activities, within 60 days of EPA's approval of this Addendum to Supplemental Assessment Report. If any of those penetrations is unable to be sealed, GE will also include in that report a proposal for the collection and analysis of soil gas samples in the vicinity of the unsealed penetration(s) in accordance with Condition 2 of EPA's June 25, 2007 letter. That sampling, if necessary, will be performed in conjunction with the material/product inventory and soil gas/indoor air sampling activities scheduled for Buildings 51 and 59 in fall 2007.

Please contact me if you have any questions or comments.

Sincerely,



Richard W. Gates
Remediation Project Manager

Attachments

cc: Tim Conway, EPA
Holly Inglis, EPA
Rose Howell, EPA*
K.C. Mitkevicius, USACE
Linda Palmieri, Weston (2 copies)
Anna Symington, MDEP*
Jane Rothchild, MDEP*
Susan Steenstrup, MDEP (2 copies)
Mayor James Ruberto, City of Pittsfield
Pittsfield Commissioner of Public Health
Nancy E. Harper, MA AG*

Dale Young, MA EOE*
Michael Carroll, GE
Andrew Silber, GE
Rod McLaren, GE
Andrew Hogeland, GE Plastics
John Wood, GE Plastics
James Nuss, ARCADIS BBL
James Bieke, Goodwin Procter
Public Information Repositories
GE Internal Repositories

(* without attachments)

Attachments

Attachment A

Building 51 Photos

Attachment A-1

Penetrations to the Underlying
Soil That Were Sealed During
Recent Assessment



(11) Photo of conduit holes sealed with concrete grout in the mechanical room at the south end of the building.



(13) Photo of a superficial crack sealed with concrete grout in the floor in the mechanical room at the south end of the building.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO SUPPLEMENTAL SOIL GAS MIGRATION
ASSESSMENT REPORT AND SAMPLING PLAN**

BUILDING 51 PHOTOS



(14) Photo of fire riser in the high bay storage area in the northwest corner of the building that has been sealed with concrete grout.



(15) Photo of roof drain in the high bay storage area in the northwest corner of the building that has been sealed with concrete grout.

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BUILDING 51 PHOTOS

Attachment A-2

Potential Penetrations to the
Underlying Soil That Could Not
Be Addressed in Available
Timeframe



(19) Photo of representative open gravel floor area in the old boiler room at the northeast end of the building



(20) Photo of a pump pit located below a steel grating area in the old boiler room at the northeast end of the building



(21) Photo of an open pipe chase in the old boiler room at the northeast end of the building



(24) Photo of a fire pump pit located just off the compressor room at the northeast corner of the building

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BUILDING 51 PHOTOS



(25) Photo of a fire line drain in the fire pump room just off of the compressor room at the northeast corner of the building

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ASSESSMENT REPORT AND SAMPLING PLAN**

BUILDING 51 PHOTOS

Attachment B

Building 59 Photos

Penetrations to the Underlying
Soil That Were Sealed During
Recent Assessment



(4) Photo of a crack in the concrete floor on the north wall of the server room that appeared to be superficial with a depth of 2 - 3" and has now been sealed with concrete grout.



(16) Photo of two conduit openings on the west wall of the fenced in record storage area in front of the steel double door opening that have now been sealed with concrete grout.

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BUILDING 59 PHOTOS



(17) Photo of a superficial crack on the east end of the fenced in records storage area in front of the double fenced gate that has now been sealed with concrete grout.



(19) Photo of a superficial crack in front of the southeast exit door of the records storage area that is not fenced in that has now been sealed with concrete grout.

07/20/07 SYR-D85-KLS
30905001/CDR/BLD_59/30905G05.cdr

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ASSESSMENT REPORT AND SAMPLING PLAN**

BUILDING 59 PHOTOS

 **ARCADIS** BBL
Infrastructure, environment, facilities

ATTACHMENT

B



(20) Photo of a superficial crack in the concrete floor that runs from north to south in front of the mechanics crib that has now been sealed with concrete grout.



(25) Photo of previous location of steam pipes that extended through a steel grated plate in the northeast corner of the maintenance shop area. The steam pipes have now been cut below the steel grate and a new steel grate was fitted and sealed over the pit below.

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30905001/CDR/BLD_59/30905G06.cdr

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BUILDING 59 PHOTOS

 **ARCADIS** BBL
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ATTACHMENT

B